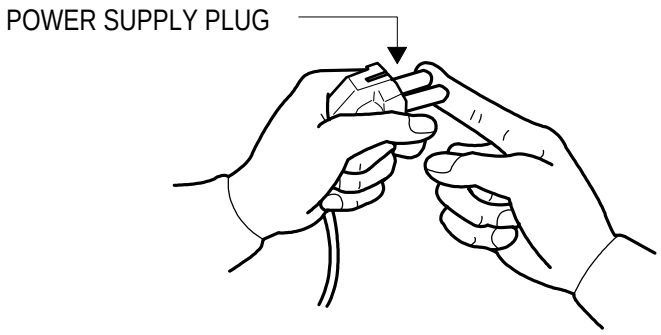
5. Trouble Diagnosis

- As the micom washing machine is configured of a complicated structure, there might be a need for a service call. The information below is prepared for exact trouble diagnosis and suitable repair guide.

Caution for the Repair and Replacement

Please follow instructions below for trouble diagnosis and parts replacement.

1) As some electronic components are damaged by the charged static electricity from the resin part of wash machine or the human body, prepare the human body earth or remove the potential difference of the human body and wash machine by contacting the power supply plug when the work contacting to PCB is executed.



2) Since AC220~240V is applied to the triac T1 and T2 on P.C.B, the electric shock may occur by touching and be careful that the strong and weak electricity are not mixed.

3) If the P.C.B assembly is out of order, do not replace the component on P.C.B except TACT switch since the component is coated by the urethane.

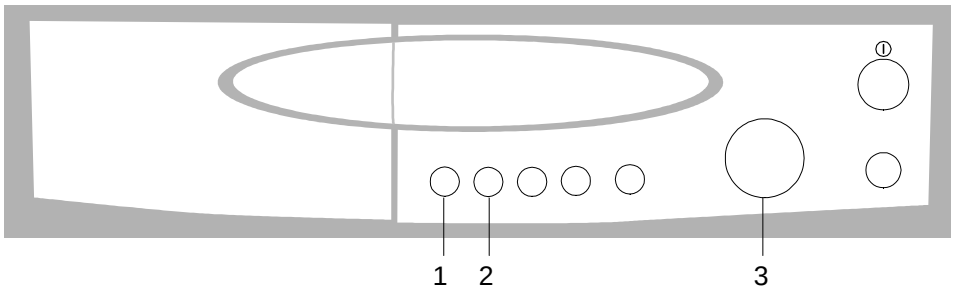
4) As the P.C.B assembly is designed for easy handling, do not replace the P.C.B assembly by the wrong diagnosis and follow the procedure of trouble diagnosis when the micom is not operated normally.

5) As the parts on P.C.B are coated by the urethane, they can not be tested by the test bar of the meter. Check the trouble by the test mode method according to the procedure.

5-1. Trouble Diagnosis

No	Item	Cause and treatment
1	The power is not supplied	- Is the PCB connector connected well? - Is the voltage normal? - Is the power supply plug connected well? - Is the noise filter connected well? - Is the secondary output of the power supply transformation normal? - Is the fuse disconnected? (option) ï If above points are not found, the PCB assembly is out of order. Replace it.
2	The water is not supplied.	- Is the knob open? - Did you push START/PAUSE button after selecting the course? - Is the water supply valve connected well? - Is the winding of the water supply valve continuous? - Is the connection and operation of the pressure switch normal? ï If above points are not found, the PCB assembly is out of order. Replace it.
3	The wash does not start though the water supply is stopped.	- Is the connection and operation of the pressure switch normal? - Is the pressure switch hose damaged so that the air is leaked? - Is the pressure switch hose bent? - Check the operation of the water level switch. ï If above points are not found, the PCB assembly is out of order. Replace it.
4	The drum does not rotate during washing.	- Is the belt connected well? - Is the winding of the motor continuous? (Rotor winding, stator winding, generator) - Is the motor protector normal? ï If above points are not found, the PCB assembly is out of order. Replace it.
5	The wash is executed while the water is supplied.	- The PCB assembly is out of order. Replace it.
6	The drum rotates in one direction during washing. (The drum rotates in one direction for SPIN.)	- The PCB assembly is out of order. Replace it. (Inversion relay open trouble)
7	Drainage problem.	- Is the drainage hose bent? - Is the winding of the drainage pump continuous? - Is the drain filter clogged by waste? - If above points are not found, the PCB assembly is out of order. Replace it.
8	Dehydration problem.	- Unbalance is detected. - Put in the laundry uniformly and start again.
9	Abnormal noise during SPIN.	- Is the pulley nut loose? - Is the transport safety device removed? - Is the product installed on a level and stable surface? (Little noise may be generated during the high-speed SPIN.)
10	Leak breaker or current/leak breaker is down during washing.	<When the leak breaker and current breaker is installed separately> - When the leak breaker is down, check and sure it is grounded. - When the current is down, the current is leaked. <Is the breaker down when the leak/current breaker is combined?> - Check the rated capacity of the current and leak breaker. The current breaker may be down due to the lack of the current when the washing machine and other apparatus are used. In this case, execute the cold water wash to check whether the current capacity is lacking.
11	The heating is not executed.	- Is the wash heater terminal unplugged? - Is the wash heater normal? - If above points are not found, the PCB assembly is out of order. Replace it.

6. Test Mode



1. Driving Compartment Test Mode

A. Hold down "2" and "1" keys simultaneously and then press ⏻ (POWER S/W) on.
Hold down "1" and "2" keys simultanesously (each processing for 0.3sec) and then press ⏻ (POWER S/W) on.

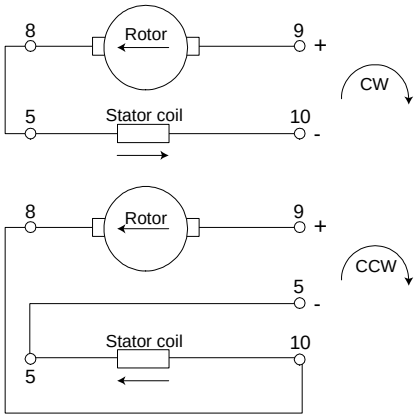
B. The driving compartment can be tested when you press ì 3î key right after entering into the initial stage of the TEST MODE.

ï Driving Compartment Test

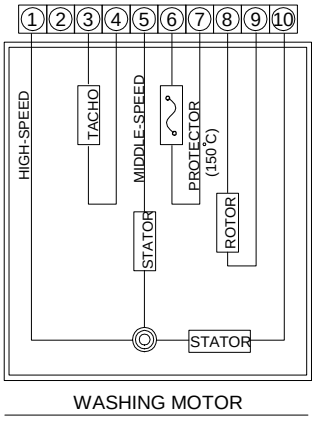
Pre-wash VALVE ON(0.3sec) → OFF(0.3sec) → Main wash(0.3sec) → OFF(0.3sec) →
Rinse VALVE ON(0.3sec) → OFF(0.3sec) → Pump MOTOR ON(0.3sec) → OFF(0.3sec) →
MOTOR RELAY1 ON(0.3sec) → OFF(0.3sec) → MOTOR RELAY2(0.3sec) → OFF(0.3sec) →
MOTOR RELAY2 ON(0.3sec) → OFF(0.3sec) → HEATER RELAY ON(0.3sec) → OFF(0.3sec) →
DOOR OPEN (Function continues when door is closed)

7. Designation of Main Components

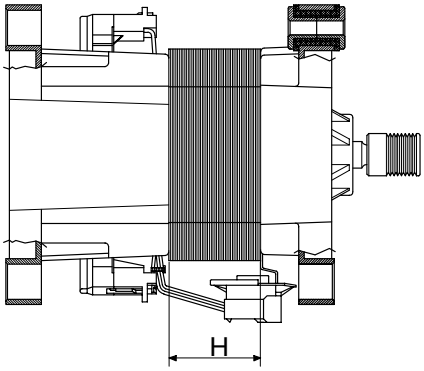
7-1 Normal / Reverse Revolution of Motor and R. P. M. Control



<Figure1>



<Figure2>

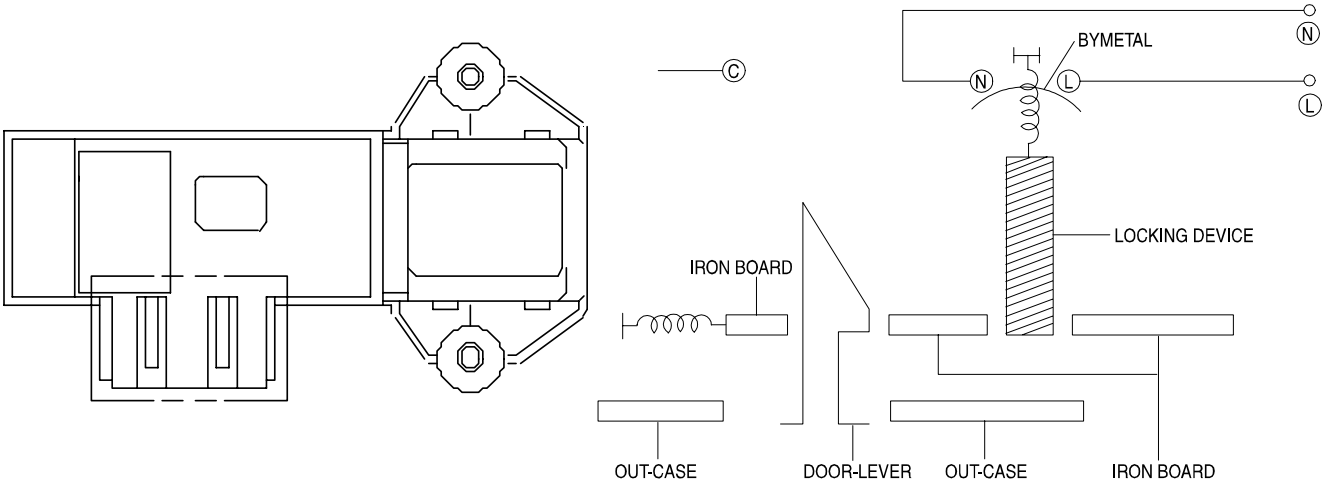


<Figure3>

	STATOR(5.1)	STATOR(5.1)	ROTOR(8.9)	TACHO(3.4)	PROTECTOR (6.7)	"H" (mm)	Code-No.	Remarks
Resistancev alue	-	1.592Ω	2.094Ω	38.8Ω	0	39	DC31-00002E	P8091
	2.07Ω	0.90Ω	2.36Ω	42.7Ω		45	DC31-00002C	P1091 P1291
Rated value	220~240V/50Hz							

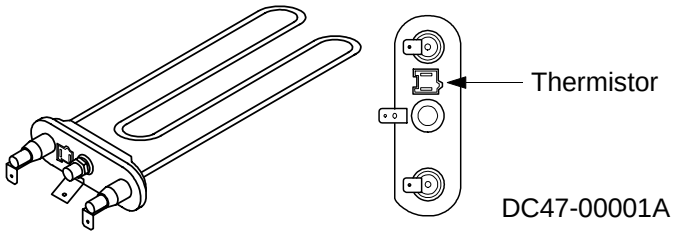
7-2 Door safety Device

When Door is closed, door stay closed. if "set" is operated, power supplied to Ⓝ, Ⓛ wires have bymetal keep the door closed, and electronical power flows between Ⓛ and Ⓒ make it operate.



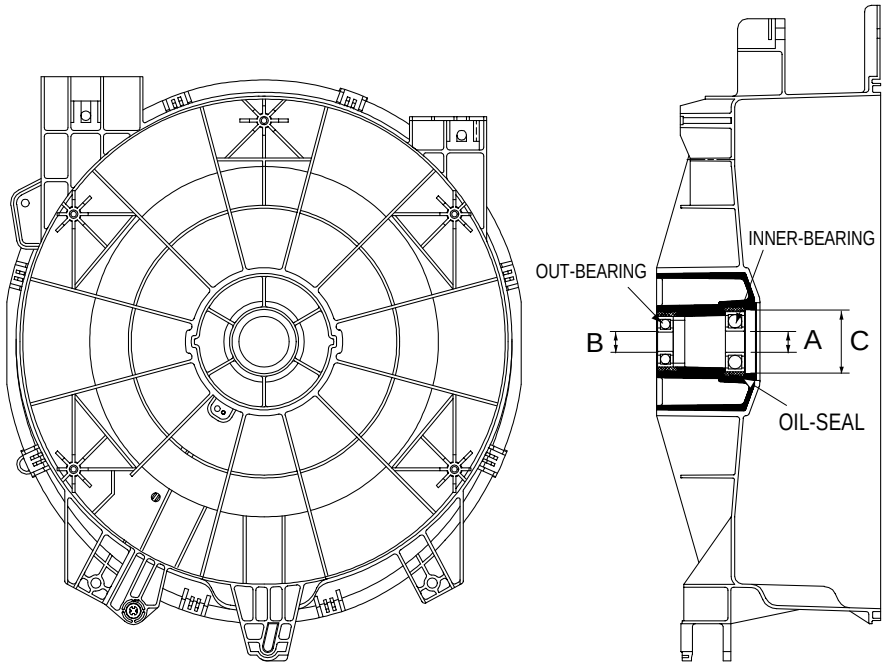
7-3 HEATOR

1) Capacity : AC 230V/2000W
2) Location : Bottom of TUB
3) Function : Raise the water temperature
supplied at the wash process.
4) Resistance value : 23~29Ω
5) Thermal Fuse : 169◦C



DC47-00001A

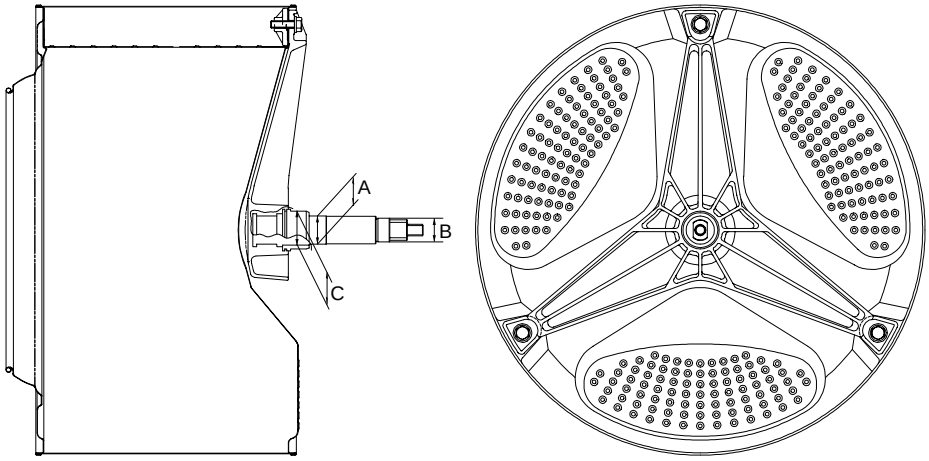
7-4 ASSY-TUB BACK



(unit : mm)

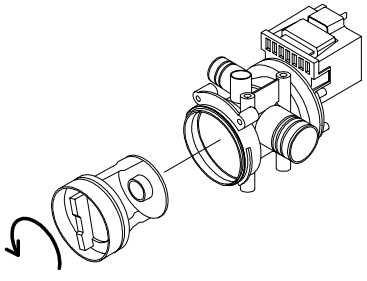
TYPE	INNER-BEARING(A)	OUT-BEARING(B)	OIL-SEAL(C)	Assy-Housing Bearing(D)	REMARKS
I	30	25	43.9	DC97-00214B	P1091/P1291
II	20	17	24.3	DC97-00214K	P8091

7-5 ASSY-DRUM



(unit : mm)

TYPE	(A)	(B)	(C)	CODE-NO.	REMARKS
I	30	25	44.7	DC97-01463A	Lifter type P1091/P1291
II	20	17	25	DC97-01463B	Lifter type P8091

10-6 ASSY-PUMP DRAIN

1) Capacity : AC 230V 34W
2) Location : Front bottom(R)
3) Resistance : 150Ω ~ 180Ω